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| 10/627,590 | 07/24/2003 | Rolf J. Flen | 11838.56US01 | 2971 |
| 23552 | 7590 | 12/27/2005 | EXAMINER | |
| MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903 | | | EDWARDS JR, TIMOTHY | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2635 | |

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,590

Applicant(s)

FLEN ET AL.

Examiner

Timothy Edwards, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 is/are allowed.
- 6) ☒ Claim(s) 1-9 and 12 is/are rejected.
- 7) ☒ Claim(s) 10 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner is unclear of the term "the payload field is flexibly defined".

Specification

3. The disclosure is objected to because of the following informalities: page 1 of the specification, under section "Reference to Copending Applications" contain blanks for respective application serial numbers these numbers should be supplied by applicant.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 2,3,12 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al '616.

Considering claim 2, Johnson discloses a data generating system comprising, a) executing an idle function while waiting for an event (see col 4, lines 21-24 and col 11, lines 50-56); b) detecting a trigger for an event (see col 4, lines 18-20 and col 8, lines 41-47); c) evaluating the event after the trigger is detected (see col 8, lines 11-18); d) processing a received packet when the event corresponds to a received packet detection (see col 8, lines 11-18); e) recording at least one metering parameter when the event corresponds to a schedule recording cycle (see col 7, line 67 to col 8, line 5); f) formatting a packet for transmission when the event corresponding to a schedule reporting cycle (see col 8, lines 41-47 and fig 3); g) starting a packet transmission after formatting the packet for transmission (see col 8, lines 57-66).

Considering claim 3, Johnson discloses the limitation of this claim see col 11, lines 30-44 and col 12, lines 64-67.

Considering claim 12, the limitations of this claim are interpreted and rejected as stated in claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson '616.

Considering claim 4, 1) Johnson does not specifically recite checking the received data packet for errors. Johnson discloses a data formatted with error detection code (see fig 3), in col 7, lines 43-49 receiving commands to disconnect service and control loads.

One of ordinary skill in the art would readily recognize the desire to authenticate the accuracy of these commands because of their function. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate an error detection code in all the received signal in the Johnson system because Johnson discloses an error detection code in his transmitted signals. The use of error detection codes is well known in the art;

2) Johnson does not specifically recite trapping an error condition when the received packet contains error. One of ordinary skill in the art would readily recognize there are numerous methods of detecting an error in a data packet (CRC and checksum fields). Obviousness is the same as stated in part (1) above; 3) extracting a command from a

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received packet if no error is founded and processing the command is inherent in devices that receive command data.

Considering claim 5, Johnson discloses the limitation of this claim see col 7, lines 59-63.

Considering claim 6, the limitation of this claim is interpreted and rejected as stated in claim 4, part (2).

5. Claims 7,8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson '616 as applied to claim 2 above, and further in view of Ardalan et al '839.

Considering claim 7, Johnson does not specifically recite extracting an address that is associated with the received packet, ignoring the received packet when the address does not match an identifier. Johnson discloses in col 7, lines 53-66 a utility device receiving command signals. One of ordinary skill in the art readily recognizes the use of a specific address is attached to each message associated with individual meters (see fig 3). Ardalan teaches in col 2, lines 64-67 and col 3, lines 14-22 a receiver extracting an address (a LAN address) that is associated with the received packet, ignoring the received packet when the address does not match an identifier (a meter address).

Johnson is concern with the use of communications network to communicate data from a utility device to a central data terminal. One of ordinary skill in the art would recognize the central data terminal could be miles from the central station and there would be a

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need for LAN in local areas and means to transmit the utility data to a further central station. Therefore, it would have been obvious to one of ordinary skill in the art to modify the communication method of the Johnson system to have the receivers to extract an address that is associated with the received packet, ignoring the received packet when the address does not match an identifier as taught by Ardalan because both systems are concern with transmitting and receiving data/commands in a wide area communication environment and this data might be area specific and not be for each meter in a given area; 2) extracting a command from a received packet when the address matches the identifier is inherent in devices that receive command data.

Considering claim 8, the limitations of this claim are interpreted and rejected as stated in claim 4.

Allowable Subject Matter

6. Claim 1 is allowed.
7. Claim 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

8. Claims 10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: in the environment of data communication with respect to claim 9 the prior art fails to teach or suggest the formatting a packet according to a protocol which includes a asynchronous flag field, a health flag field, a payload field and an error check and detection field, wherein the payload field is defined by a predetermined sequence when the asynchronous flag field is not set, and the payload field is differently defined when the asynchronous flag field is set.

With respect to claim 10 the prior art fails to teach or suggest selecting a sequence number based on the current day of the week, and wherein formatting the packet for transmission includes organizing a packet payload according to the selected packet sequence number.

With respect to claim 11 the prior art fails to teach or suggest indexing a table by the current day of the week, retrieving a group of data identifiers from the indexed table, and wherein formatting the packet for transmission includes organizing data that is associated with the retrieved group of a data identifier in a payload field of the packet.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hunt '488, Jahr et al '831, Fitzmeyer et al '992, Wells, II et al '984, Hasegawa '322, Trask et al '569, James '188, Drabing '136, and Mason, Jr. et al '371 discloses a power line communication system.

10. Any inquiry concerning this communication should be directed to Examiner Timothy Edwards at telephone number (571) 272-3067. The examiner can normally be reached on Monday-Thursday, 8:00 a.m.-6:00 p.m. The examiner cannot be reached on Fridays.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached at (571) 272-3068.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-4700, Mon-Fri., 8:30 a.m.-5:00 p.m.

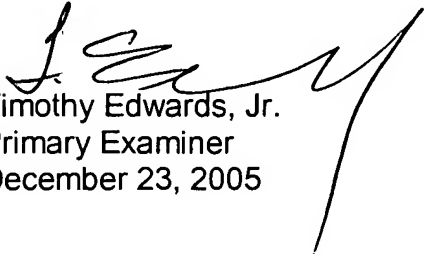
Any response to this action should be fax to:

(571) 273-8300 (for formal communications intended for entry).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov> or contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Timothy Edwards, Jr.
Primary Examiner
December 23, 2005